



401 }	402 }	403 }	404 }
Type	Euclidean	Homogeneous	$\sigma(X)$
Reflector	$-nxn + 2n$	$s = n + e\delta$	1
Inversion	$\frac{\rho^2}{x - c} + c$	$s = c - \frac{1}{2}\rho^2 e$	$\left(\frac{x - c}{\rho} \right)^2$
Rotation	$R(x - c) R^{-1} + c$	$R_c = R + e(cxR)$	1
Translation	$x - a$	$T_a = 1 + \frac{1}{2}ae$	1
Transversion	$\frac{x - x^2a}{\sigma(x)}$	$K_a = 1 + ae_0$	$1 - 2a - x + x^2a^2$
Dilation	λx	$DI = e^{-\frac{1}{2}E, \ln \lambda}$	$ ^{-1}$
Involution	$x^* = -x$	$E = e \wedge e_0$	-1

FIG. 4

Diagram illustrating a robotic arm assembly. The assembly includes a base (501) and a joint (502). A horizontal arm (503) is connected to the joint. A vertical arm (504) is connected to the horizontal arm. A vertical arm (505) is connected to the vertical arm (504).